

**Supplementary Table S1** Sixteen primer pairs Details screened by common and unique genes

Primer name	Gene name	Gene function	Pathogen species	Identity %	Primer name	Gene name	Gene function	Pathogen species	Identity %
A7091	Bfra_008708	putative vacuolar amino acid transporter 3 protein	<i>Botrytis fragariae</i>	88.98	A5519	SS1G_07283	hypothetical protein	<i>S. sclerotiorum</i>	93.33
A2977	mecA	Cystathionine-beta - synthase	<i>Aspergillus fumigatus</i>	69.2	A15484	SS1G_11498	hypothetical protein	<i>S. sclerotiorum</i>	100
A4045	SS1G_12843	similar to translation initiation factor 2 gamma subunit	<i>Sclerotinia sclerotiorum</i>	91.49	A6145	SS1G_13755	hypothetical protein	<i>S. sclerotiorum</i>	95.33
A7371	BCIN	hypothetical protein	<i>S. sclerotiorum</i>	85.61	NA0754	SS1G_06178	hypothetical protein	<i>S. sclerotiorum</i>	95.41
A6155	LHS1	Endoplasmic Reticulum Chaperone	<i>Magnaporthe oryzae</i>	55.5	A2582	BCIN_15g0315_0	hypothetical protein	<i>S. sclerotiorum</i>	95.6
A2001	Bfra_004413	cut9 interacting protein scn1 protein	<i>B. fragariae</i>	83.92	MA6823	SS1G_00008	hypothetical protein	<i>S. sclerotiorum</i>	94.21
MA8494	SS1G_08759	hypothetical_protein	<i>S. sclerotiorum</i>	94.36	NA6415	SS1G_09671	hypothetical protein	<i>S. sclerotiorum</i>	95.32
A5051	SS1G_07048	hypothetical protein	<i>S. sclerotiorum</i>	89.15	MA4210	Bfra_000766	putative polygalacturonase protein	<i>B. fragariae</i>	83.3

**Supplementary Table S2** Design and screen of specific primer sequences of *Sclerotinia* spp.

Primer	Sequences (5'-3')	Primer	Sequences (5'-3')
A7091-F	ATGTCGACTCCTTCCTCTTC	A5519-F	CGTATAACTGTTTGTAATATAAACTTTG
A7091-R	ATTATGGCTCTATTCCACGAT	A5519-R	TCGTGTTCTTGGTGATGACATTGAG
A2977-F	TCATTTTATCGAAAGGCTTC	A15484-F	TGTATTTCTCTTACACACCATCACC
A2977-R	ACCAAGCCAGTAGTTATCGA	A15484-R	TCATTCACCAACCTCGGCAA
A4045-F	GATGTGATAAAGCTATGGTTCTG	A6145-F	TTGGATAACCACAACCTTGCGAC
A4045-R	GATGTGATAAAGCTATGGTTCTG	A6145-R	TAGGTAAGTGTATTGGATCCGGT
A7371-F	ATGTATGCTACGGGTATTTA	NA0754-F	CCAACTATCCAAACACAAACACTTAT
A7371-R	TCAGGAGATACTGACTCCCGA	NA0754-R	AAACACTTGGATGTTTCTGGCA
A6155-F	ATGTTTTACAAGACAAGAATTACCGCT	A2582-F	TACCCCAACAATGTCTTGCCAAC
A6155-R	CAACTTCACGTGAGTCAAGATGAG	A2582-R	TTAAGTCGAGTTACTGATCGCC
A2001-F	ATGGCGTCGATCTTGCC	MA6823-F	CAACCAGATTCCCGACCAAG
A2001-R	TCAAGCAAGCTTTGTAGTGC	MA6823-R	ATGCCAGATCACTATGGACCAG
MA8494-F	GGAATCACATATAGATATCATGAATA	NA6415-F	TTGGATAACCACAACCTTGCGAC
MA8494-R	ATG TTCAGAAACAATTATGATAAC	NA6415-R	AGGTAAGTGTATTGGATCCGGTA
A5051-F	ATGTCTTTCACCTCCGAGA	MA4210-F	TGTCAACACGCACCGAAAAGT
A5051-R	TCATCCTCTTGAAGCATCA	MA4210-R	TCATGAATTCCACACCTTG